

CLAIMS

What is claimed is:

1. A data storage medium, comprising:

AV data; and

mark-up documents to reproduce the AV data in an interactive mode,

wherein among the mark-up documents, a start-up document comprises information about the mark-up documents to be displayed according to a set parental level.

2. The data storage medium of claim 1, wherein the information of the start-up document comprises meta-information of a parental level, where the set parental level and link information on one of the mark-up documents correspond to the parental level in the meta-information.

3. The data storage medium of claim 2, wherein the link information comprises information of one of the mark-up documents to be displayed when the set parental level is higher than the parental level in the meta-information and information of one of the mark-up documents to be displayed when the set parental level is less than the parental level in the meta-information.

4. The data storage medium of claim 1, wherein the information of the start-up document is link information indicating a path of one of the mark-up documents corresponding to the set parental level.

5. A data storage medium, comprising:

AV data; and

mark-up documents to reproduce the AV data in an interactive mode and corresponding to two different parental levels.

6. A data storage medium, comprising:

a video directory storing AV data; and

an interactive directory storing data to reproduce the AV data in an interactive mode,

wherein the interactive directory comprises sub-directories corresponding to two different parental levels, and in each of the sub-directories, mark-up documents corresponding to a parental level are stored.

7. A data storage medium, comprising:
 - a video directory storing AV data; and
 - an interactive directory storing a start-up document comprising a mark-up document to reproduce the AV data in an interactive mode,
 - wherein the interactive directory comprises sub-directories corresponding to two different parental levels, where in each of the sub-directories mark-up documents corresponding to a parental level are stored, and the start-up document comprises link information of the plurality of mark-up documents stored in each of the sub-directories.
8. The data storage medium of claim 7, wherein the link information is written using a link tag.
9. A data storage medium, comprising:
 - AV data;
 - a mark-up document to reproduce the AV data in an interactive mode; and
 - display rule information displaying the mark-up document to correspond to a set parental level.
10. The data storage medium of claim 9, wherein the display rule information comprises information indicating whether to display elements of the mark-up document corresponding to at least two different parental levels.
11. The data storage medium of claim 9, wherein the display rule information is written according to cascading style sheet (CSS) rules.
12. The data storage medium of claim 9, wherein a class value is allotted to one of the elements of the mark-up document, and the display rule information comprises information indicating whether to display an element to which the class value is allotted.
13. The data storage medium of claim 12, wherein the display rule information is written in the form of a CSS file.

14. The data storage medium of claim 1, wherein the AV data is DVD-video data, and the parental level meets DVD-video standards.

15. A data storage medium, comprising:

AV data; and

a mark-up document to reproduce the AV data in an interactive mode and comprising a manner in which another mark-up document written in a Script language is provided to meet a parental level that is set in advance.

16. The data storage medium of claim 15, wherein the mark-up document is linked to a script file written in a script language or a CSS file.

17. The data storage medium of claim 1, wherein in response to the set parental level being equal to or higher than a level of the start-up document, access to one or more of the mark-up documents corresponding to the level is allowed.

18. The data storage medium of claim 17, wherein the set parental level and the level of the start-up documents comprise values 1 through 8 defined by data storage medium-video standards for compatibility.

19. The data storage medium of claim 17, wherein:
the mark-up documents include a list of URLs for web servers, and
in response to the set parental level being equal to or higher than the level of the start-up document, access to one or more of the URLs corresponding to the level is allowed.

20. The data storage medium of claim 9, wherein in response to the set parental level being equal to or higher than a level of the display rule information, access to one or more elements of the mark-up document corresponding to the level is allowed.

21. The data storage medium of claim 20, wherein the set parental level and the level of the display rule information comprise values 1 through 8 defined by data storage medium-video standards for compatibility.

22. The data storage medium of claim 20, wherein:

the mark-up document includes a list of URLs for web servers, and
in response to the set parental level being equal to or higher than the level of the display
rule information, access to one or more of the URLs corresponding to the level is allowed.